

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

15/3813

Applicant: Fenn et al

Serial No: 08/890,490

Filed: July 09, 1997

Title: Frozen Food Product

Group: 1761

Examiner: C Nessler

Commissioner of Patents & Trademarks  
Washington DC 20231

Declaration under 37CFR 1.132

I, Paul Edward Cheeney, residing at 18, King Street, Earls Barton, Northamptonshire, NN6 0LQ, UK declare and say:

1. I have a Bsc (hons) degree in Food Science from Southbank University, London. I have been employed as a Research Assistant at Unilever Research, Colworth House, Sharnbrook, Bedfordshire MK44 1LQ, UK since 1989.
2. I am familiar with US patent application having the serial number 08/890,490.
3. US patent application having the serial number 08/890,490 teaches a frozen confectionery product comprising AFP, wherein the ice crystals in the product have an aspect ratio of greater than 1.9.
4. I am familiar with US patent number 5, 620, 732 from Clemmings et al. Clemmings et al teaches the preparation of ice cream containing an AFP which is preferably Type I AFP (see col 3 lines 21-22).

5. Accordingly the Example 1 of Clemmings et al was repeated as far as possible using the information provided and the aspect ratio measured of the ice crystals obtained in the ice cream provided.
6. A pre-mix for preparing ice cream was made having the following formulation;

Ingredient	Weight %
Condensed skim milk	24
Cream, 40% fat	43
Egg yolk with sugar	5
Sucrose	13
Water	14
Vanilla	1

The pre-mix was split into two batches, one a control, and one to which native Type I AFP was added (post-pasteurisation) at a level of 10ppm.

The mixes were frozen by conventional means using a Gusti freezer and were then placed directly into a cold store set at either -25°C or -12°C, thereby excluding the cold hardening step.

7. The aspect ratio was measured according to the protocol given in Example II of US application 08/890,490.
8. For storage at -25°C, the AFP Type I containing ice cream composition had an aspect ratio of 1.77. The control ice cream composition had an aspect ratio of 1.48.

For storage at -12°C, the AFP Type I containing ice cream composition had an aspect ratio of 1.67. The control ice cream composition had an aspect ratio of 1.49.

9. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such wilful false statements may jeopardise the validity of this application or any patent issued therein.

Signed:

Paul Edward Cheeney

Dated: